

ABSTRACT

INVESTIGATION OF POLYMORPHISM IN SOME NATIVE CATTLES FOR LACTOFERRIN GENE PROVIDING RESISTANCE TO MASTITIS

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This study was carried out to determine Lactoferrin gene polymorphism in Native cattle raised in Aydın province. DNA was extracted from 100 individual blood samples collected from cattle raised in 6 flocks at different locations. The PCR-RFLP methods were used to determine genotypes. A 1050 bp DNA fragment within bovine Lactoferrin gene was amplified with PCR and then digested with restriction endonuclease enzyme *HinfI*. The *HinfI* digestion produced a mixture containing of 635, 480, 180 and 120 bp. In this study we have detected a new allele as "C" with different fragments (480, 180 and 120 bp) which has not been observed in literature yet. In present study, A and C allele frequencies were identified with 0.435 and 0.565; AA, AC and CC genotype frequencies were identified with 0.17, 0.53 and 0.30, respectively. The B allele of Lactoferrin gene has not been observed. In order to reveal more concrete information, sequencing for the Lactoferrin gene may be useful. Results obtained from this study will provide a significant contribution to the literature.

Key words: Native cattle, Lactoferrin gene, PCR-RFLP, *HinfI*